

science on saturday program survey

Lawrence Livermore National Laboratory
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dr. ed mores

Director, National Ignition Facility

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Goal: Learn about global climate, fusion energy - the energy source that powers our Sun, and the plan to duplicate this energy source on Earth at the National Ignition Facility.

Listen carefully to the presentation.
Answers these questions and get extra credit from your teacher.

key points

1. We need more energy!

2. The sun uses fusion to make tons of energy.

3. Fusion is the process of squeezing 2 atoms together to make energy!

4. We use lasers to make fusion!
A laser is a coherent single colored light.
(Happy 50th Birthday!)
NIF and LIFE

1. How does the sun make energy?

2. What is fusion?

3. How does fusion work?

4. What are 3 characteristics of a laser?

a. _____

b. _____

c. _____

5. How does NIF use laser to achieve fusion?

6. LIFE (?)

harnessing fusion energy



edward mores

Ed Moses grew up working for his Dad in construction. He earned his B.S. from Cornell University in electrical engineering and his Ph.D. from Cornell University in laser physics. He has worked in research, technology and engineering at Hughes Aircraft, Lawrence Livermore National Laboratory and in private industry. He has worked working on techniques to use lasers to process materials, new ways to treat cancer using radiation therapy, and most recently in building the National Ignition Facility to ensure our nation's security, create a source of limitless clean energy and to enable science of the cosmos in the lab. Ed holds patents in laser technology, fusion energy and computational physics. He wants everyone to learn about this exciting and growing field.



syllia mores

Sylvia Moses is a graduate of Granada High School in Livermore and UC Berkeley where she earned a BS in Integrative Biology and Earth and Planetary Science. During that time she did research in Southeast Utah, health education in Kathmandu, Nepal, and WAS AN intern at the Smithsonian in Washington. She is currently a teacher in San Francisco as part of the Teach for America Program.